

DS - 04/26/2015 **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

<b>Title of Invention</b>	<b>Devices Employing Colloidal-Sized Particles</b>
-------------------------------	--

Application Number : 10/711767  
Confirmation Number: 5766  
First Named Applicant: David Marr  
Attorney Docket Number: 34090.0273  
Art Unit: 3746  
Examiner: Koczko



Search string: ( 3341274 or 3556156 or 4267509 or 4556195 or 5026681 or 5427663 or 5681484 or 5837115 or 5953166 or 5992820 or 6007690 or 6095189 or 6097530 or 6114405 or 6251691 or 6261430 or 6355491 or 6368871 or 6387707 or 6802489 ).pn

## US Patent Documents

**Note: Applicant is not required to submit a paper copy of cited US Patent Documents**

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
MR	1	3341274	1967-09-12	Marks		359	296
	2	3556156	1971-01-19	Fuller, Jr.		138	43
	3	4267509	1981-05-12	Graham		324	244.1
	4	4556195	1985-12-03	Calkins		251	129.2
	5	5026681	1991-06-25	Hed		505	165
	6	5427663	1995-06-27	Austin et al.		204	180.1
	7	5681484	1997-10-28	Zanzucchi et al.		216	2
	8	5837115	1998-11-17	Austin et al.		204	450
	9	5953166	1999-09-14	Shikano		359	837
	10	5992820	1999-11-30	Fare et al.		251	129.01
	11	6007690	1999-12-28	Nelson et al.		204	601
	12	6095189	2000-08-01	Ben-Shalom		137	606
	13	6097530	2000-08-01	Asher et al.		359	288
	14	6114405	2000-09-05	Zhuang et al.		522	99
	15	6251691	2001-06-26	Seul	B1	436	534
	16	6261430	2001-07-17	Yager et al.	B1	204	455
	17	6355491	2002-03-12	Zhou et al.	B1	436	518
	18	6368871	2002-04-09	Christel et al.	B1	436	180
	19	6387707	2002-05-14	Seul et al.	B1	436	164
✓	20	6802489	2004-10-12	Marr et al.	B2	251	129.14

**Signature**

Examiner Name	Date
/Michael Koczko Jr/	09/25/2006



## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Application Number	10/711,767
Filing Date	October 4, 2004
First Named Inventor	Marr, et al.
Art Unit	3746
Examiner Name	<del>not yet assigned</del> Kocz
Attorney Docket Number	34090.0273

Attorney Docket Number	34090.0273
------------------------	------------

[illegible][illegible]

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	10/711,767	
			Filing Date	October 4, 2004	
			First Named Inventor	Marr, et al.	
			Group Art Unit	3746	
			Examiner Name	<del>not yet assigned</del> Koczo	
Sheet	2	of	3	Attorney Docket Number	34090.0273

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
MX	B	A. MANZ, C.S. EFFENHAUSER, N. BURGGRAB, D.J. HARRISON, K. SEILER and K. FLURI, "Electroosmotic Pumping and Electrophoretic Separations for Miniaturized Chemical Analysis Systems", <i>J. Micromech. Microeng.</i> , 1994, pp. 257-265, 4, IOP Publishing Ltd., United Kingdom	
	C	M.A. UNGER, H. CHOU, T. THORSEN, A. SCHERER, and S.R. QUAKE, "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography", <i>Science</i> , 7 April 2000, pp. 113-116, 288, American Association for the Advancement of Science, USA	
	D	D.J. BEEBE, J.S. MOORE, J.M. BAUER, Q. YU, R.H. LIU, C. DEVADOSS and B. JO, "Functional Hydrogel Structures for Autonomous Flow Control Inside Microfluidic Channels", <i>Nature</i> , 6 April 2000, pp. 588-590, 404, Macmillan Magazines Ltd., USA	
	E	Q. YU, J.M. BAUER, J.S. MOORE and D.J. BEEBE, "Responsive Biomimetic Hydrogel Valve for Microfluidics", <i>Applied Physics Letters</i> , 23 April 2001, pp. 2589-2591, 78- #17, American Institute of Physics, USA	
	F	S. KAWATA, H. SUN, T. TANAKA and K. TAKADA, "Finer Features for Functional Microdevices", <i>Nature</i> , 16 August 2001, pp. 697-698, 412, Macmillan Magazines Ltd., USA	
	G	K. ZAHN and G. MARET, "Two-dimensional Colloidal Structures Responsive to External Fields", <i>Current Opinion in Colloid &amp; Interface Science</i> , 1999, pp. 60-65, 4, Elsevier Science Ltd., United Kingdom	
	H	M. BÖHMER, "In Situ Observation of 2-Dimensional Clustering During Electrophoretic Deposition", <i>Langmuir</i> , 27 November 1996, pp. 5747-5750, 12- #24, American Chemical Society, USA	
	I	J.D. DEBORD, S.EUSTIS, S.B. DEBORD, M.T. LOFYE and L.A. LYON, "Color-Tunable Colloidal Crystals from Soft Hydrogel Nanoparticles", <i>Advanced Materials</i> , 3 May 2002, pp. 658-662, 14- #9, Wiley-VCH Verlag GmbH, Germany	
	J	R.C. HAYWARD, D.A. SAVILLE and I.A. AKSAY, "Electrophoretic Assembly of Colloidal Crystals with Optically Tunable Micropatterns", <i>Nature</i> , 2 March 2000, pp. 56-59, 404, Macmillan Magazines Ltd., USA	
	K	R.E. KUSNER, J.A. MANN, J. KERINS and A.J. DAHM, "Two-Stage Melting of a Two-Dimensional Colloidal Lattice with Dipole Interactions", <i>Physical Review Letters</i> , 5 December 1994, pp. 3113-3116, 73-#23, The American Physical Society, USA	
✓	L	R.E. KUSNER, J.A. MANN and A.J. DAHM, "Two-Stage Melting in Two Dimensions in a System with Dipole Interactions", <i>Physical Review B</i> , 1 March 1995, pp. 5746-5759, 51- #9, The American Physical Society, USA	

Examiner Signature	/Michael Koczo Jr/	Date Considered	09/25/2006
--------------------	--------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE  STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete If Known</b>	
				Application Number	10/711,767
				Filing Date	October 4, 2004
				First Named Inventor	Marr, et al.
				Group Art Unit	3746
				Examiner Name	<del>not yet assigned</del> Koczo
Sheet	3	of	3	Attorney Docket Number	34090.0273

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
MX	M	G. PAN, R. KESAVAMOORTHY and S.A. ASHER, "Optically Nonlinear Bragg Diffracting Nanosecond Optical Switches", <i>Physical Review Letters</i> , 19 May 1997, pp. 3860-3863, 78- #20, The American Physical Society, USA	
	N	A. RICHEL, N.P. JOHNSON and D.W. McCOMB, "Observation of a Bragg Reflection in Photonic Crystals Synthesized from Air Spheres in a Titania Matrix", <i>Applied Physics Letters</i> , 3 April 2000, pp. 1816-1818, 76- #14, American Institute of Physics, USA	
	O	A.T. SKJELTORP, "One- and Two-Dimensional Crystallization of Magnetic Holes", <i>Physical Review Letters</i> , 19 December 1983, pp. 2306-2309, 51- #25, The American Physical Society, USA	
	P	M. TRAU, D.A. SAVILLE and I.A. AKSAY, "Field-Induced Layering of Colloidal Crystals", <i>Science</i> , 3 May 1995, pp. 706-709, 272, American Association for the Advancement of Science, USA	

Examiner Signature	/Michael Koczo Jr/	Date Considered	09/25/2006
--------------------	--------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.